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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,505	01/22/2004	Bohus Ondrusek	60001.271US01	7248
27488	7590	12/04/2006	EXAMINER	
MERCHANT & GOULD (MICROSOFT)			BELL, CORY C	
P.O. BOX 2903			ART UNIT	
MINNEAPOLIS, MN 55402-0903			PAPER NUMBER	
			2164	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/763,505

Applicant(s)

ONDRUSEK ET AL.

Examiner

Cory C. Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application:
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-26 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892).
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-26 have been examined.

#### *Response to Arguments*

As per the rejections under 35 USC 112 2<sup>nd</sup>, all rejections have been withdrawn in light of applicant instant amendment.

As per the rejections under 35 USC 101, the rejection stands as applicants instant amendment does not overcome the 101 rejection set forth in the previous office action. The examiner has proposed a preamble that will overcome the 101 rejections below.

As per the rejection of claim 1 under 35 USC 102 in the previous office action, the applicant's arguments are not persuasive. The dependency matrix as cited in the previous action must inherently be stored in some type of memory in order for the system to be functional. This collection of data about binary dependencies stored in a memory is a database, using the broadest reasonable interpretation (i.e. a collection of data), and it is a binary dependency database as it consist of information about binaries.

As per the rejection of claim 3 under 35 USC 102 in the previous office action, the applicant's arguments are moot in view of the new grounds of rejection.

As per the rejection of claim 6 under 35 USC 102 in the previous office action, the applicant's arguments are not persuasive. Section 3.5 states "then there is no dependency relationship between components" which is clearly a likelihood on a dependency relationship being required.

As per the rejection the rejection of claims 14 and 20 under 35 USC 102 in the previous office action, the applicant's arguments are not persuasive. The examiner first notes the in the

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previous office action there was a typo as claim 20 was supposed to be rejected under the same grounds of claim 14 not claim 1. However, it is noted that the applicant should be germane to all presented rejections. The examiner will consider all traversals presented with each claim on both claims. The dependency matrix as cited in the previous action must inherently be stored in some type of memory in order for the system to be functional. This collection of data about binary dependencies stored in a memory is a database, using the broadest reasonable interpretation (i.e. a collection of data), and it is a binary dependency database as it consists of information about binaries. The examiner also cannot find where in Li it is disclosed that the analysis is performed by a human, and thus applicant's arguments appear to be factually incorrect.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20-26 rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. A computer-readable medium does not have the ability to perform steps.

The examiner suggests the following preamble:

A computer-readable medium having computer executable instructions encoded thereon, the instructions being executed by a processor to provide the steps comprising:

### ***Claim Objections***

3. Claim 1 is objected to as it states "may span" which causes the last portion of the claim to be optionally recited and thus non-limiting.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1,2, 4-11, and 13-26 are rejected under 35 U.S.C. 102(a) as being anticipated by “Managing Dependencies in Component-Based Systems Based on Matrix Model” by Bixin Li provided in applicant information disclosure statement.

6. *As per Claim 1* Li discloses the features as follows,

1. A method for linking binary dependency relationships, comprising: obtaining dependency relationships relating to binaries{Section 3.4 teaches a Dependency Matrix, for which dependency relationships relating to the binaries must be obtained to create the matrix} ; storing the dependency relationships within a binary dependency database{The dependency matrix is inherently stored in some data structure, which is a binary dependency database using the broadest reasonable interpretation}; and providing dependency information relating to the binaries that links dependencies that may span across binaries and functions.{Section 3.4 Dependency Matrix}

7. *As per Claim 2* Li discloses the features as follows,

2. The method of claim 1, further comprising, classifying the dependency relationships into dependency types.{Section 3.4 second paragraph}

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8. *As per Claim 4* Li discloses the features as follows,  
4. The method of claim 2, further comprising determining a strength of a bond relating to the binaries. {Section 1 teaches dependencies being explicit direct, explicit indirect, implicit direct, and implicit indirect which show different bond strengths between dependencies}
9. *As per Claim 5* Li discloses the features as follows,  
5. The method of claim 4, further comprising determining at least first order dependencies. {Section 3.4 dependency matrix shows at least first order dependencies}
10. *As per Claim 6* Li discloses the features as follows,  
6. The method of claim 5, further comprising determining a likelihood of whether the dependency is required. {Section 3.5}
11. *As per Claim 7* Li discloses the features as follows,  
7. The method of claim 4, further comprising performing analysis regarding a footprint associated with specific binaries. {Sections 3.4 and 3.5 and 4.1 analyzing file dependencies is regarding the footprint of the files included in those dependencies}
12. *As per Claim 8* Li discloses the features as follows,  
8. The method of claim 4, further comprising determining binary dependency clusters within the binaries. {Section 4.1}
13. *As per Claim 9* Li discloses the features as follows,  
9. The method of claim 1, further comprising using a vector to represent dependency information for one of the binaries. {Section 3.4 one row of the matrix}
14. *As per Claim 10* Li discloses the features as follows,

10. The method of claim 9, further comprising creating a dependency matrix comprising at least two of the vectors. {Section 3.4 dependency matrix}
15. *As per Claim 11* Li discloses the features as follows,
11. The method of claim 10, wherein the dependency matrix is an nth order dependency matrix. {Section 3.4 dependency matrix}
16. *As per Claim 12* Li discloses the features as follows,
12. The method of claim 10, further comprising obtaining a full dependency matrix {Section 3.4 dependency matrix} and identifying binary circular dependency clusters. {Section 4.1}
17. *As per Claim 13* Li discloses the features as follows,
13. The method of claim 1, wherein obtaining the dependency relationships relating to the binaries further comprises determining static and dynamic dependencies. {Section 3.4 shows dynamic dependencies and section 3.1 teaches static dependencies, i.e. modules}
18. *As per Claim 14* Li discloses the features as follows,
14. A system for linking binary dependency relationships, comprising: a software system containing binaries; {Section 2 CBS} a binary dependency database that is configured to store static and dynamic dependency relationships relating to the binaries; {Section 3.1 teaches storing all metadata, including all types of dependencies} and a processing tool for processing the dependency relationships. {Sections 3.5 and 4 teach analysis which requires a processing tool}
19. *As per Claim 15* Li discloses the features as follows,
- See Claim 2 rejection.

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20. *As per Claim 16* Li discloses the features as follows,  
See Claim 4 rejection.
21. *As per Claim 17* Li discloses the features as follows,  
See Claim 7 rejection.
22. *As per Claim 18* Li discloses the features as follows,  
See Claim 10 rejection.
23. *As per Claim 19* Li discloses the features as follows,  
See Claim 12 rejection.
24. *As per Claim 20* Li discloses the features as follows,  
See Claim 14 rejection.
25. *As per Claim 21* Li discloses the features as follows,  
See Claim 2 rejection.
26. *As per Claim 22* Li discloses the features as follows,  
See Claim 4 rejection.
27. *As per Claim 23* Li discloses the features as follows,  
See Claim 7 rejection.
28. *As per Claim 24* Li discloses the features as follows,  
See Claim 8 Rejection.
29. *As per Claim 25* Li discloses the features as follows,  
See Claim 10 rejection.
30. *As per Claim 26* Li discloses the features as follows,  
See Claim 12 Rejection.



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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

31. Claims 1, 2, and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2004/0046785 filed 9/11/2002, known hereafter a Keller.

1 (currently amended): A method for linking binary dependency relationships,  
comprising:

obtaining dependency relationships relating to binaries(Para 23);

storing the dependency relationships within a binary dependency database(paras 115 and 125); and

providing dependency information relating to the binaries that links dependencies that may span across binaries and functions(paras 23 and 115 and 125).

2 (currently amended): The method of Claim 1, further comprising, classifying each of the dependency relationships into a dependency type(Paras 23, and 71, 72, and 73).

3 (currently amended): The method of Claim 2, wherein classifying each of the dependency relationships into the dependency types further comprises classifying the dependency type as a dynamic type when the dependency relationship is established at a runtime(Paras 63 and 73), and classifying the dependency type as a static type when the dependency relationship is established from inspecting the binaries(Para 23 and 72).

*Allowable Subject Matter*

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Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**SAM RIMELL**  
**PRIMARY EXAMINER**